

8-28-12

DECIMALS \leftrightarrow FRACTIONS

DEC. \rightarrow FRACTIONS

EX: $0.6 \rightarrow \frac{6}{10} = \frac{3}{5}$

STEPS:

- ① Say the dec. The last place value is the denominator.
- ② The # behind the dec. pt. is the numerator
- ③ Simplify

EX: $0.875 = \frac{875}{1000} = \frac{7}{8}$

EX: $4.15 = 4 \frac{15}{100} = 4 \frac{3}{20}$
mixed #

FRACTION \rightarrow DEC.

EX: $\frac{4}{5} = \frac{8}{10} = 0.8$

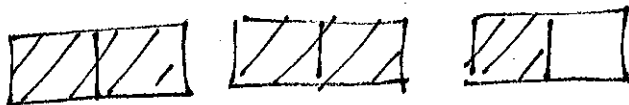
EX: $\frac{2}{3} = 3 \overline{) 0.66} = 0.\overline{6}$
 $\begin{array}{r} 0.66 \\ - 1.8 \\ \hline 20 \end{array}$

STEP:

- ① Divide numerator by denominator

MIXED #s \leftrightarrow IMPROPER FRACTIONS

Mixed # \rightarrow Improper Fraction

Ex: 

$$2\frac{1}{2} = \frac{5}{2}$$

STEPS:

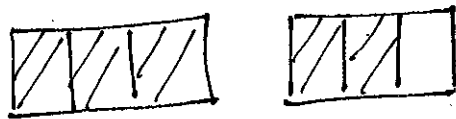
- ① Multiply whole # times denominator
- ② Add the numerator
- ③ This becomes your numerator
- ④ The original denominator stays

Ex: $\underbrace{4\frac{3}{4}}_x + 16 + 3 = \frac{19}{4}$

Ex: $\underbrace{8\frac{1}{6}}_x = \frac{49}{6}$

Ex: $10\frac{5}{6} = \frac{65}{6}$

Improper Fraction \rightarrow Mixed



$$\frac{5}{3} = 1\frac{2}{3}$$

STEPS :

- ① Divide top by bottom
- ② This gives your whole #

$$\begin{array}{r} 1 \\ 3 \overline{) 5} \\ \underline{-3} \\ 2 \end{array}$$

- ② Remainder becomes the numerator
- ③ The original denominator stays

$$\text{Ex: } \frac{25}{3} = 8\frac{1}{3}$$
$$\begin{array}{r} 8\frac{1}{3} \\ 3 \overline{) 25} \\ \underline{-24} \\ 1 \end{array}$$